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ABSTRACT

A survey of staff and student attitudes toward selected innovative approaches to learning that had been in operation for four years was conducted. The population surveyed comprised the entire Bettendorf, Iowa, Middle School staff and student body. Questionnaires were developed to elicit pertinent staff and student opinions toward (a) space utilization, (b) team teaching, (c) continuous progress, (d) independent study, (e) standards and expectations, and (f) expressed philosophy. Results were analyzed according to type, degree, and correlation between staff and student opinions. Though staff and student attitudes appeared equally highly positive toward some of the innovations considered, results revealed significant differences between staff and student opinions regarding certain aspects of innovation. Further, both staff and students expressed uncertainty toward and/or denial of proposed benefits of some innovative approaches. Innovative approaches to learning offer many benefits to both student and teacher; however, they contain many unique problems that must be identified and solved. (Author)

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interests, self concept, aspirations, etc. According to Kelly (1969), "It has now become abundantly clear that how a person feels is more important than what he knows. This seems true because how one feels controls behavior, while what he knows does not." He further concluded, "Subject matter and feeling are so closely interwined that they can no longer be considered a duality [p. 456]." It hereby seems quite apparent that measurements based on academic achievement alone are totally insufficient. To evaluate the results of these programs, one must also be able to measure these less tangible aspects of an individual's learning. A thorough search of the literature revealed that neither the vehicle(s) of measurement or a system of data analysis for "innovative evaluation" exists at the present time.

Although it appears that the product of certain innovative programs cannot effectively be measured at this time, staff and student attitude toward innovative approaches to learning can be investigated.

Purpose of the Study

The purpose of this study was to conduct an opinion survey designed to elicit pertinent staff and student attitudes toward the current middle school operation.

General Design of the Study

Accomplishment of this investigation was by (a) the development of attitude scales for measuring student and staff attitudes toward "innovative approaches" to learning, and (b) measurement of staff and student attitudes toward innovative programs that have been in operation for several years via the attitude scales (questionnaires)

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developed in (a).

Limitations of the Study

The study was limited to staff and student attitudes and opinions toward innovative approaches to learning. It was not designed to establish techniques for the measurement of non-tangible concepts such as changes in attitude, interests, self concept, aspirations, etc. The population surveyed included the entire staff, student body and in-house administrative personnel. Innovative areas to be considered included space utilization (open space-small room), team teaching, team planning, continuous progress, independent study, standards and expectations (student and staff), and personal interpretations of the school's "child centered" philosophy. A major limitation of this study was in the review of the literature and related research. Though there is no scarcity of verbal and written proposed benefits of current innovations, little hard data exist to acclaim their effectiveness (Carvelti, 1967). Even less has been done to consider two or more innovations collectively. Kaelin, in a review of the literature as late as 1970, concluded that no evaluative studies on open schools or team teaching in open schools were found.

Need for the Study

Many educators, even entire school systems, have initiated or are in the process of adopting "innovative" change with neither proof of past results nor any apparent means of evaluating their own endeavors. In a study on open space utilization, Cheek (1970) found that districts were adopting the plan (open space concept) with little

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or no rationale based on research and expert analysis. The paucity of information available from an extensive literature review augments the need for evaluative studies in the innovative areas of open space facilities, team teaching-team planning, continuous progress, non-gradedness, individualized instruction, and student evaluative procedures in the affective domain. Though many schools have adopted "innovative" techniques since the mid-sixties, there remains a dearth of evidence to substantiate individual claims of success. Proposals by Reynolds (1966) and Keeley (1968) that educational programs are almost never evaluated on a systematic basis, and what starts out as a trial persists as established practice even though it may be invalid, attested to the convictions of a number of authorities that effective evaluation of educational programs is grossly inadequate. It is increasingly apparent that most information available seems to be based on hearsay and fragmented opinions related to personal experiences (Cheek, 1970). The information gathered in this study should add to the general knowledge concerning opinions and perceptions of those involved in innovative approaches to learning.

Definition of Terms

Open Space School

A type of school facility containing large instructional areas unbroken by partitions. An open space facility contains a large group of students (usually 100-130) with the flexibility to group according to student needs. Areas within the structure are separated by furniture arrangement only. Each center contains its own media center. A

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team of four or five teachers operate cooperatively in each open space learning center.

Team Teaching

A type of instructional organization in which two or more teachers are given the responsibility, working together, for all or a significant part of the instruction of the same group of students (Shaplin, 1964). A team of four or five teachers operate cooperatively in each open space learning center containing 100-130 students.

Team Planning

The cooperative planning by two or more persons of the curriculum, activities, and evaluative techniques to be utilized in team teaching.

Continuous Progress

A student given greater responsibility for his own learning begins on a level at which he is able to perform, to learn systematically at his own pace.

Independent Study

The pursuit of learning as planned by the individual and teacher(s) and undertaken by the individual with limited assistance from the teacher(s).

Standards and Expectations

Cognitive and affective gains by the students must be considered, as well as the personal behavior of each individual (teacher and student) within the learning environment.

Social Philosophy Interpretation

Staff and student opinions on the social philosophy of the International Middle School: (1) acceptance of personal philosophy and (2) level of attainment of each philosophy.

Overview and Plan for Reporting the Study

The following procedure has been used for reporting this study:

Chapter I, "The Introduction," has presented an introduction, a discussion of purpose, general design, limitations and need for the study, and a definition of terms.

Chapter II, "The Review of the Related Literature," presents a review of literature and research related to the development and evaluation of innovation programs. The review contains a historical account of, opinions toward, and attempts to evaluate innovative approaches to learning.

Chapter III, "The Research Design and Procedure," presents a detailed description of the sample description, step-by-step development of survey instruments and the method of data collection.

Chapter IV, "The Data Analysis and Interpretation," presents the procedures utilized in processing and interpretation the data.

Chapter V, "The Summary, Conclusions, Implications, and Recommendations," contains a summary of findings of and conclusions drawn from an analysis of the data, implications of the results, and recommendations for utilization of the results for further research.

CHAPTER III

Research Design and Procedure

Survey questionnaires (staff and student) were utilized to gather the opinions of a staff and student body currently operating in an innovative program. The specific areas considered included space utilization (open and conventional), team teaching-team planning, continuous progress, standards and expectations, independent study, and interpretation of the expressed middle school philosophy. The survey instruments utilized were designed to (1) collect as many positive and negative opinions concerning each of the innovative areas being investigated as possible, (2) establish the percentage of staff with common opinions on those items that express themselves of most concern, and (3) establish student opinions on areas of concern which apply directly to the student body.

Description of the Sample

The survey participants included the 84 member staff and 1426 member student body of the Bettendorf, Iowa, Middle School.

Development of the Staff Questionnaire

Since no suitable questionnaire instruments were available from the literature, one of the basic tasks was the development of a questionnaire that would elicit personal opinions from staff and students concerning the specific areas of the following: (1) space utilization (open and conventional), (2) team teaching-team planning, (3) continuous progress, (4) independent study, (5) standards and

expectations, and (6) interpretation of the expressed middle school philosophy. Development of the staff questionnaire consisted of three distinct phases: (1) a written opinion survey, (2) priority of the written opinion survey items by the staff, and (3) construction of the staff questionnaire from the priority items.

Written Opinion Survey

The written opinion survey was conducted during March, 1972. Responses were guided into personal feelings, either positive or negative, by the open ended survey instrument listed in Appendix A.

Administration of the open opinion survey took place at a regularly scheduled faculty meeting. The purpose of the research was carefully shared with the staff. Then, each staff member was requested to write, if possible, one or more responses to each area of the survey instrument. Dedication of the staff to this task was exhibited in the fact that each participant spent one hour or more formulating and listing their personal opinions.

The results of the written opinion survey were tabulated into positive aspects of and concerns regarding each of the key areas considered. An attempt was made throughout to include all responses without alteration. However, where appropriate, several responses that were complementary to each other were combined and listed as a single entry [see Appendix B].

Priority of Written Opinion Survey Items by Staff

The tabulated responses of the written opinion survey were returned to each staff member for the purpose of establishment of

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priority items. Each staff member was requested to identify and select the four statements that he/she desired to have considered further on a staff questionnaire. They were not requested to list an order of preference, but rather, just to identify four statements from each section. The results of this priority activity were tabulated, listing the incidence of response for each item in a given section. The item receiving the greatest number of responses was designated (1), that receiving the second greatest number (2), and so forth. This priority of items for each section has been designated by the number in parenthesis by each statement. Since the number of items that could be utilized on the questionnaire was necessarily limited, only those receiving the top six priorities have been so designated [see Appendix B].

Construction of the Staff Questionnaire from Priority Items

The first step in the final construction of the staff questionnaire consisted of the conversion of the statements of opinion into question form. Statements receiving the top two priorities in each section were utilized in the questionnaire construction. The remaining statements were selected in a manner that would eliminate the duplication of an idea, thereby contributing greater breadth to the survey instrument. In case of a duplication, the next higher priority was picked up, i.e., item four, instead of item three, was incorporated into the questionnaire.

The questionnaire was balanced by the use of a proportionate number of questions from each section. Since the sections on space utilization and team teaching-team planning each contained two areas,

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the questionnaire contained approximately twice as many questions from each of these two areas as it did for each of the other areas. To reduce the influence of suggestion, 30 positive and 33 negative questions were arranged somewhat alternately throughout the questionnaire. Further, the lead question for each section was determined by the random flip of a coin.

An opportunity for open-ended comments on advantages and disadvantages of the innovations being considered was included at the end of each section.

The completed questionnaire was submitted to and critically reviewed by 11 professional educators including three middle school teachers, four teachers outside the middle school area, one reading specialist, two administrators, and a guidance counselor. Upon receipt of their responses, the questionnaire was rewritten with their suggestions for improvement incorporated. The revised questionnaire was again submitted to four persons, including a reading specialist, for a second critical review. After minor alterations based on their comments were made, the questionnaire was administered at a regularly scheduled faculty meeting on February 7, 1973. The entire population of 84 staff members participated.

Development of Student Questionnaire

Questions for the student questionnaire were selected from those items on the staff questionnaire that applied directly to students. A chance flip of a coin determined that the first of the 20 items be positive. Thereafter, the positive and negative questions were arranged somewhat alternately throughout the student survey instrument. No

attempt was made to control the proportion as had been done on the child questionnaire. Items on the student questionnaire were stated in the same manner (positive or negative) as they appeared on the child questionnaire. The result was a somewhat unbalanced instrument consisting of twelve positive and eight negative questions.

An attempt was made to write the questions at a level that most grade six students could understand. Both the vocabulary level and the length of each statement were considered.

The completed questionnaire was submitted to and critically reviewed by nine persons including three teachers, five students and one reading specialist. The questionnaire, rewritten with their suggestions for improvement incorporated, was submitted a second time to the reading specialist for a specific determination of reading level. After minor revisions the student questionnaire was administered.

Administration of the student questionnaire took place in a resource center (quiet study area), containing approximately 100 students. Directions were carefully reviewed and students were reminded of the value in well-considered responses. Utilizing the advice of the reading specialist, students at all grade levels were assisted with terminology outside their own personal reading vocabulary. The sample consisted of 1323 students or approximately 93 per cent of the student body.

Null Hypotheses

Null hypotheses were tested at the .05 level of confidence that there would be no differences in frequencies of positive, negative,

List as opinion responses of students and teachers for each of the following:

1. Boredom at open space vs. small classroom.
2. The appropriateness of open space to the problem of students "not listening."
3. Student selection of teachers.
4. Individualization in open spaces.
5. Benefits of team teaching to learning.
6. Students "getting lost" in large group areas.
7. Independent study possibilities.
8. Students' feeling of success.
9. Lack of individual attention.
10. Student groupings according to ability.
11. Student involvement in decision-making.
12. Availability of instructional activities and materials.
13. Possibilities of a student working at his own level.
14. Student-teacher relationships.
15. Limits to be placed on student [illegible].
16. Misuse of learning centers.
17. Possibilities of a student working at his own rate.
18. Achievement of standards set for students to those for State outside of school.
19. Guidance necessary for student personal responsibility development.
20. Student support with students.

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Positive Questions Related to Standards and Expectations

49. There is an adequate chance for students and teachers at Bettendorf Middle School to be involved in setting standards and personal expectations for their class and for themselves.

51. Academic standards and expectations must vary with each individual child.

52. Standards set for Bettendorf Middle School students are compatible with those found in society.

54. Basic minimum standards have been established at Bettendorf Middle School and are clearly understood by the entire staff.

FIGURE 5.--Staff response to questions related to positive aspects of standards and expectations.

Positive Questions Related to Philosophy

57. A student will progress, if given the opportunity to make his own decisions and work at his own speed; thereby, he will become more responsible.

60. Student option and choice means each student has free choice in what, how, or even if he learns.

62. With few exceptions there is evidence of good student-teacher relationships at Bettendorf Middle School.

63. Additional staff instruction is necessary in the techniques and fundamentals of the current Bettendorf Middle School operation.

FIGURE 6.--Staff response to questions related to positive aspects of philosophy

Negative Questions Related to Space Utilization

2. Open space is less conducive to work and more "open" to conversation and socialization than a smaller, more contained room would be.

4. Smaller, more traditional classrooms are necessary for those who cannot function in a large open space with its many distractions.

5. Open space is not effective for the slow learner or dependent type student.

7. To increase the number of students in one place necessarily increases the confusion and control problems.

9. Open space learning is too impersonal--students get lost too easily in a large group.

11. Communication and rapport with students are more difficult in open space situations.

13. The general problem of "students not listening" has resulted from student efforts to tune out the additional distractions of an open space learning environment when they personally are ready for quiet.

FIGURE 7.--Staff responses to questions related to negative aspects of space utilization.

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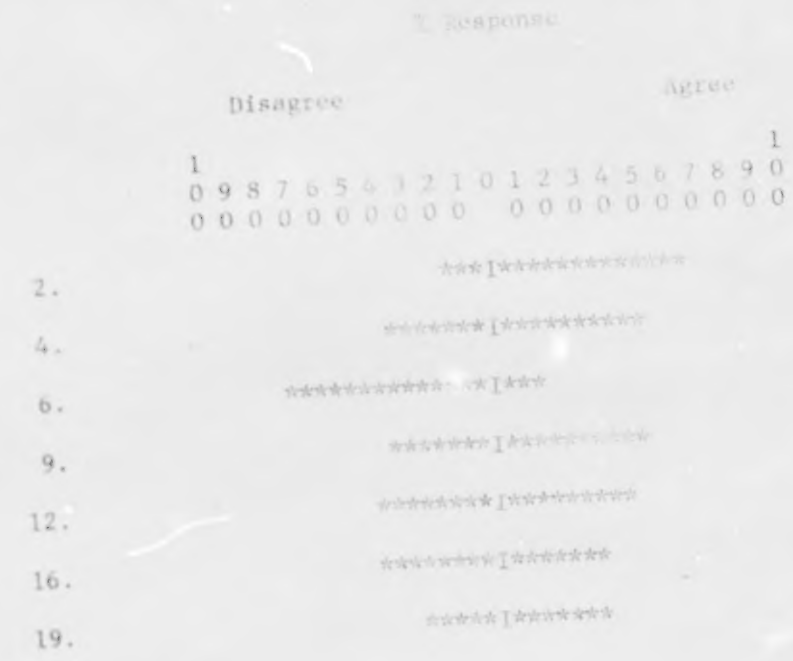

FIGURE 14.--Student response to negative questions on student questionnaire.

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Staff-Student Perceptions of Specific Concepts

Comparisons of staff and student attitudes toward a specific concept have been arranged as follows: 1) statement of the staff question and student question related to a specific concept, 2) graphic presentation of the percentage responses for each question pair, and 3) tabulation of response frequency and Chi Square significance determination for each question pair.

Each graph consists of a continuum from 100 per cent negative to 100 per cent positive. The mid-point (I) was established at zero per cent as a reference point for directionality determination. Percentage responses have been rounded to the nearest five per cent and denoted by (*) = 5%.

Responses of agree and strongly agree were graphed collectively as agree responses. Responses of disagree and strongly disagree were graphed collectively as disagree responses. One hundred per cent minus the sum of the positive and negative responses yields the percentage of no opinion.

Each contingency table contains the response frequency for the staff and student questions being compared. Agree and strongly agree have been stated collectively as agree. Disagree and strongly disagree have been stated collectively as disagree. Staff and student questions were arranged on their respective questionnaires so that a positive (or negative) response on each would indicate that the staff and students were in agreement on the concept being considered.

Determination of Chi Square significance was based on the following two assumptions: 1) Though there might be a difference in

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the statement of the staff and student questions being compared, the concept that the two questions (one staff, one student) were considering was the same. 2) Since there was a correlation between the two questions on their respective questionnaires, their expected cell frequencies for each type response would be proportional. Any observed frequency that would differ would appear in the Chi Square, thus indicating the significance of the discrepancy between staff and student opinion.

Deviation at or above the .05 Level of Confidence has been deemed significant. For two degrees of freedom, it requires a Chi Square of 5.99 to be significant at the .05 level.

The data represent responses by 1323 students and 84 staff.

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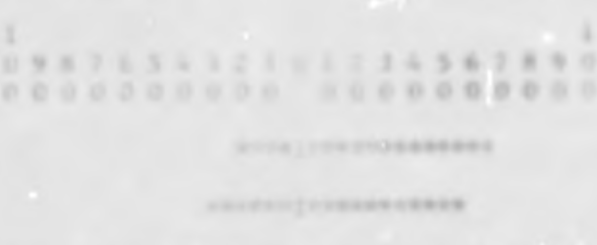

FIGURE 15.--Comparison of student (question 1) and staff (question 12) opinions regarding benefits of open space over small classrooms.

Type Response	Response Frequency	
	Student Question(1)	Staff Question(12)
Agree	423	48
Disagree	791	22
No Opinion	191	34
	(n=1305)	(n=84)
Chi Square		7.28 (df=2)
Significance Level *		Not Significant

* χ^2 = .05 = 5.99

Table 1 shows the Chi Square and frequency distribution of staff question 12 and student question 1 according to levels of agreement, disagreement, and no opinion. The results indicate that there is no significant difference between staff and student opinion regarding benefits of open space over small classrooms.

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Questions (Student 12 and Staff 47) Related to Instructional Activities and Materials

12. We usually do not have enough interesting materials and activities in most of our classes.

47. Students at Bettendorf Middle School currently have too many packets, behavioral objectives, and lectures. A greater variety of learning experiences is necessary.

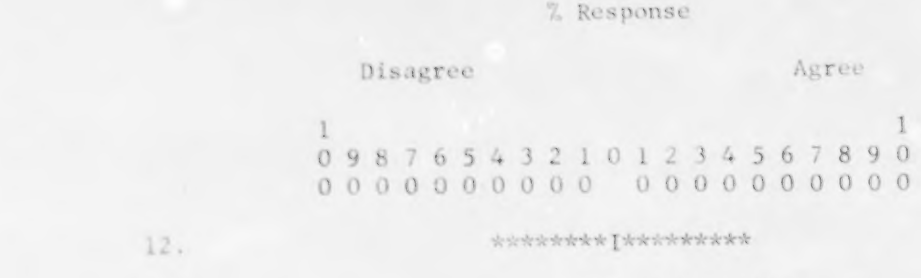

FIGURE 26.--Comparison of student (question 12) and staff (question 47) opinions regarding adequacy of instructional activities and materials.

TABLE 12

Student Question 12 and Staff Question 47

Type Response	Response Frequency	
	Student Question(12)	Staff Question(47)
Agree	574	52
Disagree	499	13
No Opinion	237	19
	(n=1310)	(n=84)
Chi Square	17.62 (df=2)	
Significance Level *	> .01	

* X^2 ÷ .05 = 5.99

Table 12 shows the Chi Square and frequency distribution of staff question 47 and student question 12 according to levels of agreement, disagreement, and no opinion. The results indicate a significant difference in staff and student opinion regarding instructional activities and materials.

Questions (Student 13 and Staff 37) Related to Student Working at His Own Level

13. I am able to work at my own level in most subject areas.

37. Continuous progress, as practiced at Bettendorf Middle School, gives each child the opportunity to learn and add to his skills without the stigma of failure.

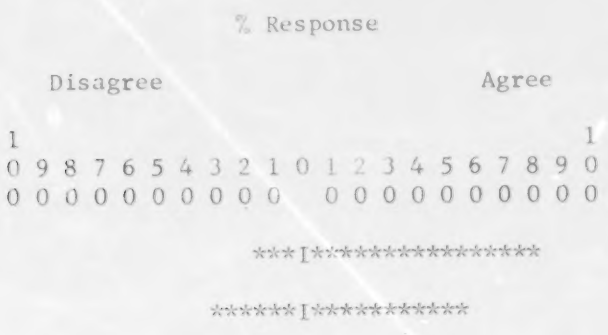

FIGURE 27.--Comparison of student (question 13) and staff (question 37) opinions regarding the ability of a student to work at his/her own level.

TABLE 13

Student Question 13 and Staff Question 37

Type Response	Response Frequency	
	Student Question(13)	Staff Question(37)
Agree	1001	48
Disagree	181	27
No Opinion	127	9
	(n=1309)	(n=84)
Chi Square	21.73 (df=2)	
Significance Level *	> .01	

* $X^2 = .05 = 5.99$

Table 13 shows the Chi Square and frequency distribution of staff question 37 and student question 13 according to levels of agreement, disagreement, and no opinion. The results indicate a significant difference in staff and student opinion regarding a student working at his own level.

Questions (Student 14 and Staff 62) Related to Student-Teacher Relationships

14. I have a good relationship with most of my teachers.

62. With few exceptions there is evidence of good student-teacher relationships at Bettendorf Middle School.

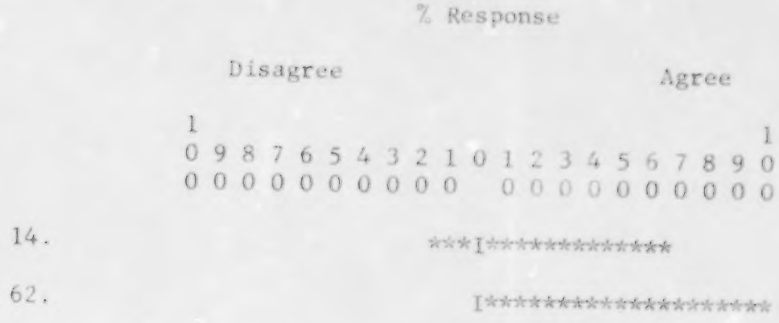

FIGURE 28.- Comparison of student (question 14) and staff (question 62) opinions regarding the relationship between students and teachers.

TABLE 14

Student Question 14 and Staff Question 62

Type Response	Response Frequency Student Question(14)	Staff Question(62)
Agree	883	82
Disagree	221	2
No Opinion	208	1
	(n=1312)	(n=84)
Chi Square	34.17 (df=2)	
Significance Level *	> .01	

* X^2 = .05 = 5.99

Table 14 shows the Chi Square and frequency distribution of staff question 62 and student question 14 according to levels of agreement, disagreement, and no opinion. The results indicate a significant difference in staff and student opinion regarding student-teacher relationships.

Questions (Student 15 and Staff 60) Related to
Limits of Student Self-direction

15. The student should have the responsibility to determine what, how or even if he should learn.

60. Student option and choice means each student has free choice in what, how or even if he should learn.

FIGURE 29.--Comparison of student (question 15) and staff (question 60) opinions regarding limitations placed on student self-direction.

TABLE 15

Student Question 15 and Staff Question 60

Type Response	Response Frequency	
	Student Question(15)	Staff Question(60)
Agree	586	12
Disagree	369	68
No Opinion	358	4
	(n=1313)	(n=84)
Chi Square	102.90 (df=2)	
Significance Level *	> .01	

* χ^2 = .05 = 5.99

Table 15 shows the Chi Square and frequency distribution of staff question 60 and student question 15 according to levels of agreement, disagreement, and no opinion. The results indicate a significant difference in staff and student opinion regarding limits of student self-direction.

Question 10 (Part 1) and Staff 9(2) Related to
Misuse of Learning Packets

10. In completing packets students tend to give answers and copy rather than helping each other do their "own" hard work.

9(2). The extensive use of packets at Antioch Middle School stifles individuality, lack of motivation, copying, etc., rather than challenging a student to do his/her best work.

1 Response

Disagree Agree

1 1
0 9 8 7 6 5 4 3 2 1 0 1 2 3 4 5 6 7 8 9 0
0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

10.

9(2).

Chart 10.--Comparison of student (question 10) and staff (question 9(2) opinions regarding misuse of learning packets.

TABLE 16

Student Question 10 and Staff Question 9(2)

Type Response	Response Frequency	
	Student Question(10)	Staff Question(9(2)
Agree	402	30
Disagree	490	23
No Opinion	335	12
$(n=1226)$		$(n=65)$
Chi Square	17.70 (df=2)	
Significance Level	< .05	

χ^2 < .05 = 5.99

Table 16 shows the Chi Square and frequency distribution of staff question 9(2) and student question 10 according to levels of opinion, disagreement, and no opinion. The results indicate a significant difference in staff and student opinion regarding misuse of learning packets.

[illegible]

[illegible]

[illegible]

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Standards and Expectations

TABLE 25

Open Ended Responses Related to
Standards and Expectations

Type Response	Percentage
Positive	23
Negative	39
Suggestions for Improvement	19
Other	19
Total	100

Table 25 shows the percentage distribution of staff opinions toward standards and expectations. Results in Table 25 indicate a considerable diversity of opinion regarding standards and expectations.

Suggestions for Improvement

1. Basic expectations (goals) must be set up. A student's program of study must be directed to reaching (if possible) or surpassing these goals. The starting point is the variable. The goal should be the minimum constant.

2. Basic expectations should be established at given points along a continuum. Students should not go beyond those points until the basic expectations are obtained.

3. Coordinated effort between teams for arrival at one set of standards and expectations is necessary. Each area presently has its own.

4. Since Iowa Basic Skills Tests cannot adequately measure individualized learning, they should be replaced with a test that will measure learning on an individual basis.

5. Standards and expectations are often too hastily compiled. Greater recognition and consideration of the wide range of student abilities are needed.

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Philosophy

TABLE 26

Open Ended Responses Related to Philosophy

Type Response	Percentage
Positive	27
Negative	48
Suggestions for Improvement	18
Other	7
Total	100

Table 26 shows the percentage distribution of staff opinions toward current philosophy. Results in Table 26 indicate a relatively high incidence of negative staff opinions toward philosophy.

Suggestions for Improvement

1. More staff instruction is needed in presenting options for individualization. How does one keep track of individual student progress? What are the alternatives to packets?

2. More learning activities are needed at Bettendorf Middle School which enable students to be the active young people they are. Excessive paper work and little activity is too confining for the 1-16 year old.

3. Since there is considerable opportunity for experimentation at Bettendorf Middle School, each team needs to give more careful consideration to what the philosophy means to its area.

4. If we are to grow together, we must talk together more. More unification of faculty is needed.

5. As far as philosophy goes, each individual teacher should be motivated by his/her own background. The Bettendorf Middle School philosophy should be used as a guide by each individual.

CHAPTER V

Summary, Conclusions, Implications, and Recommendations

The paucity of information apparent from the pertinent literature review revealed a need for additional evaluation of innovative approaches to learning. To that end, attitude scales (questionnaires) were developed and administered to measure pertinent staff and student attitudes toward "innovative programs" of the Bettendorf, Iowa, Middle School. The following presents a summary and conclusion from analysis of the data, general conclusions and implications, and recommendations for further research.

Summary and Conclusions From Data Analysis

The summary and conclusions from data analysis parallel the method of data presentation in Chapter IV and, therefore, comprise: 1) a summary of staff and student responses, 2) consideration of null hypotheses concerning staff and student opinions, and 3) conclusions from open ended responses.

Summary of Staff and Student Responses

The summary of staff and student responses was as follows: 1) a summary of staff opinions toward each section of the staff questionnaire and 2) a summary of student opinions toward the total student questionnaire. To avoid the confusion of positive responses to negative questions, negative responses to negative questions, etc., the following code was established for consideration of the results

...staff and student responses. It was used for each section of the staff questionnaire, as well as the total student questionnaire.

...Faculty and Student Response Summary

Strongly Positive: The per cent of agree responses exceeded the per cent of disagree responses by more than 40%.

Strongly Negative: The per cent of disagree responses exceeded the per cent of agree responses by more than 40%.

Positive: The agree responses exceeded the disagree responses by more than 20%, but less than 40%.

Negative: The disagree responses exceeded the agree responses by more than 20%, but less than 40%.

Inconclusive: There was 20% or less difference between the agree and disagree responses.

NOTE - Strongly positive indicates a high degree of agreement with a given statement (positive or negative). Strongly negative indicates a high degree of disagreement with a given statement (positive or negative).

...Utilization (Staff)

Strongly Positive

1. Open space provides a good opportunity for effective team teaching.

2. Open space provides an informal setting which lends itself to creative learning.

3. Smaller, more traditional classrooms are necessary for those who cannot function in a large open space with its many distractions.

9. Open space allows for large group instruction of that material which lends itself to less individual or personal attention.

10. Open space learning benefits students by exposing them to a greater variety of teaching personalities.

11. The combination of open space and small rooms utilized at Intermediate Middle School allows for grouping students according to their needs, thus resulting them to progress at their own rate and level.

12. A combination of open space and small rooms allows for better utilization of professional human resources, according to individual strengths.

Problems

1. Open space is less conducive to work and more "open" to conversation and socialization than a smaller, more contained room would be.

2. Open space is not effective for the slow learners or dependent type student.

3. To increase the number of students in one place necessarily increases the confusion and control problems.

4. Open space learning centers at Intermediate Middle School better utilize teacher strengths than more traditional classrooms would.

12. Open space allows for more individualized activities geared to the child's ability than a contained classroom would.

[illegible]

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from student efforts to cut out sounds and other distractions of the open space learning environments.

Hypothesis 3

The null hypothesis that there would be no significant difference between staff and student opinion regarding student selection of teacher was accepted at the .05 Level of Confidence.

Both the staff and student body were somewhat indecisive on the matter, i.e., each had nearly the same percentage of positive and negative responses.

Hypothesis 4

The null hypothesis that there would be no significant difference between staff and student opinion regarding socialization in open spaces was rejected at the .01 Level of Confidence.

Teachers view socialization in open spaces more critically than do students.

Hypothesis 5

The null hypothesis that there would be no significant difference between staff and student opinion regarding the benefits of team teaching was accepted at the .05 Level of Confidence.

Both the staff and student body have a very positive attitude toward the benefits of team teaching.

Hypothesis 6

The null hypothesis that there would be no significant difference between staff and student opinion regarding students getting

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lost in large group setting was rejected at the .01 level of confidence.

Students responded strongly that they do not get lost in large groups. The staff was indecisive.

Hypothesis 7

The null hypothesis that there would be no significant difference between staff and student opinion regarding independent study possibilities was rejected at the .01 Level of Confidence.

The student body responses were more positive than negative. The staff was indecisive.

Hypothesis 8

The null hypothesis that there would be no significant difference between staff and student opinion regarding student feeling of success was rejected at the .01 Level of Confidence.

Student responses revealed strong feelings of success. Staff responses to success possibilities were somewhat less certain.

Hypothesis 9

The null hypothesis that there would be no significant difference between staff and student opinion regarding lack of individual attention was rejected at the .01 level of Confidence.

Teachers view the lack of time for individual attention more critically than do students.

Hypothesis 10

The null hypothesis that there would be no significant difference between staff and student opinion regarding progress monitoring

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I. SPACE UTILIZATION: OPEN SPACE - SMALL ROOM:

Positive

Negative

II. TEAM TEACHING

Positive

Negative

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III. TEAM PLANNING

Positive

Negative

IV. CONTINUOUS PROGRESS

Positive

Negative

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V. INDEPENDENT STUDY

Positive

Negative

VI. STANDARDS AND EXPECTATIONS (Students and/or Staff):

Positive

Negative

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(3) 12. Offers a chance to talk over problems, get help, reassurance, and suggestions and obtain a fresh approach.

(1) 13. Teachers can take advantage of each others special fields of knowledge by sharing.

14. Combination of individual strengths can be especially useful in planning curriculum.

15. Provides unified teaching to all students taking the same course.

16. Develops "comradeship" within a team.

17. Results in a continuous process of evaluation.

IX. Concerns Regarding Team Planning

1. Teams too large - too many on team planning reduces efficiency in making decisions.

(2) 2. Can be highly negative if the personalities of team members clash. Perhaps many good ideas are lost because individual ideas may not agree with team decisions.

3. Some teachers hesitate to express ideas for fear of criticism and comments from other people.

(5) 4. Strong, extrovert types sometimes overpower other members with good ideas, thus stifling creative contributions.

5. Failure to arrive at immediate answers to immediate problems.

(1) 6. Lack of time when all members are available for planning.

7. Deadlines set by team leaders should be met by all.

8. Takes too much time. Too much organization about clerical matters and physical plant.

(3) 9. The amount of time we have is minimal and it seems, as of late, that this team planning time has been taken away even more for the development of philosophies, scope and sequence, etc.

(4) 10. More time is spent discussing, disagreeing, etc., than actual planning.

11. Some individuals abuse the time by absenteeism from team meetings.

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12. At times, staff personalities are in conflict and these ruptures are left unhealed - resulting in petty bickering and in-fighting.

(6) 13. We don't draw enough from outside professional sources, e.g., curriculum advisors, area colleges, etc.

14. Problem when one or two refuse to adapt to what the team plans and merely do what they want, when they want.

15. Some decisions that are determined are arrived at in mysterious ways.

16. People can lean on others. Too few do the actual planning.

17. Majority decisions are not always necessarily right. They may be maneuvered before a team meets.

X. Suggestive Comments Regarding Team Planning and Teaching

(2) 1. More time for team planning actually used for discussing student needs instead of mechanical procedures.

(6) 2. Must remember that teachers have individual differences too.

3. The purpose of planning sessions should be clearly defined and teams should work in sub-groups.

(5) 4. All teachers must join in and plan actively. Otherwise, they all may not support or feel committed to the decisions of the team.

5. Team members must be compatible.

(3) 6. The job will never be done well until more time is included in the teacher's schedule for planning.

7. Fine if team planning and not team dictation from the top.

8. A team leader who brings important announcements back to the team is imperative.

9. Time saver if work is divided effectively.

(4) 10. Very effective if team members are willing to subordinate own ideas at times and agree on what is best for students.

(1) 11. Team planning and teaching is a good arrangement if you should be fortunate enough to have a winning combination of intellect, maturity, tact, and willingness to share the load.

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XI. Positive Aspects of Continuous Progress

1. Each student has the opportunity to have steady progress in each area.

(1) 2. Students starting where they have progressed experience more success, learn more, and are less behavior problems.

(6) 3. Eliminates wasted time for students. Enables them to advance to levels that they would not reach in traditional situations.

4. S.O.S. provides the key to students working at their own pace.

5. Keeps kids interested that otherwise would be lost 100% of the time.

6. Helps to avoid frustration.

7. Provides an outlet from boredom for the gifted.

(4) 8. Allows some students to work without being held back by those less capable.

(5) 9. Children do not need to spend unnecessary time on concepts they already understand.

(2) 10. Gives each child the opportunity to learn and add to his skills without the stigma of failure.

11. Children are not forced more rapidly than they are able.

12. Individuals that are slower will not have to compete with the better students.

(3) 13. Allows for a child to move both vertically and horizontally in his academic work.

14. Progress will and must be continuous under teacher guidance and counseling.

15. Especially convenient in the case of students who are absent. Upon returning, they can continue where they had left off.

16. Through continuous progress, we can provide for the growth of students throughout the year, as well as, to meet their individual years.

17. More could be done if enrollment were smaller to the point that you could actually confer with students to prescribe.

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18. Present curriculum should be more unified, not i.e., Math, Social Studies, Science, etc.

19. Will work only if there is cooperation between all schools in Bettendorf, and if a special program is set up.

20. Must realize that program can be individualized and still not have continuous progress.

21. Requires the eliminating of grade levels.

XII. Concerns Regarding Continuous Progress

(5) 1. Students need to have opportunities to work on their own, but need more specific guidelines.

2. Student might get "trained" too personally, and never be put in a competitive situation.

3. Requires a change in the teacher's role, which is not bad in itself, but does require far more time and work.

(1) 4. If we are trying to individualize learning, we need to change our thoughts about teacher-pupil ratios.

(2) 5. Students get bogged down with packets unless enough different types of materials are provided.

(4) 6. Rather difficult for students to share ideas and express ideas to the group when they are working at different speeds.

7. A majority of students are telling by their actions that unless they are pushed, progress will sag.

(3) 8. Lack of time for careful evaluation and planning for each individual.

9. No real good test to measure continuous progress in all areas.

10. Creates a logistics problem in handling materials.

11. There is no standard definition of this term.

12. Students handing in work independently, to be returned the next day, makes excessive work for the teacher.

13. There is a vast difference between philosophy and actual practice here.

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[illegible] have been made appropriate for independent study (especially layout, B.V.R., Accession, etc.).

[illegible] student has at his disposal many media from which to learn.

[illegible] teachers to see to what height students will go on their own.

[illegible] all what is what is to "study".

[illegible] opportunity for make-up work.

[illegible] the single most valuable invention to learning.

[illegible] lots of "thinking" time.

[illegible] [illegible] makes a "learning system", in that the class, [illegible] is part of the whole, and the whole.

[illegible] for having students track themselves in many [illegible] ways.

[illegible] are now evaluated with student involvement.

[illegible] students to pursue interests in depth and [illegible] to their satisfaction, or never get involved at all.

[illegible] [illegible] the student to proceed at his own rate, explore new [illegible] in depth, and to object his schedule to meet his needs for work and/or [illegible].

[illegible] [illegible] allows a student to work in accordance with his needs and [illegible] by observing his own activities.

[illegible] [illegible] Planning Independent Study

[illegible] [illegible] to be aware more choices for students (that were neglected).

[illegible] [illegible] [illegible] is necessary. Students should not have problems, behavioral objectives, or lectures all the time.

[illegible] enough material available for students to use at home.

[illegible] [illegible] teachers do not have time to prepare extra challenging materials for a variety of students, and time to check those materials if available.

[illegible]

APPENDIX C

Staff Questionnaire

THE QUESTIONS INCLUDED IN THIS QUESTIONNAIRE REPRESENT THOSE ITEMS FROM THE INITIAL SURVEY WHICH RECEIVED TOP PRIORITY DURING PHASE II OF THIS EVALUATION.

IN EACH CASE, PLEASE READ THE STATEMENT CONCERNING MIDDLE SCHOOL INNOVATIONS CAREFULLY AND DECIDE HOW YOU FEEL ABOUT THAT STATEMENT. YOU MAY THINK THE STATEMENT IS CERTAINLY TRUE, SO YOU MIGHT SAY THAT YOU STRONGLY AGREE WITH THAT STATEMENT. YOU MIGHT, HOWEVER, FEEL THAT THE STATEMENT IS CERTAINLY NOT TRUE. IN THIS CASE, YOU MIGHT SAY THAT YOU STRONGLY DISAGREE WITH THE STATEMENT.

IN SOME CASES, YOUR FEELINGS ABOUT THE STATEMENT MAY BE SOMEWHERE BETWEEN THESE VERY STRONG ANSWERS AND YOU MIGHT JUST ANSWER AGREE OR DISAGREE. IN A FEW CASES, YOU MAY FEEL THAT YOU JUST DON'T KNOW ENOUGH ABOUT THE STATEMENT TO MARK ANY OF THESE, OR YOU MAY NOT FEEL ONE WAY OR THE OTHER; YOU WOULD THEN MARK NO OPINION.

TO MAKE IT EASIER FOR YOU, THESE DIFFERENT POSSIBLE ANSWERS ARE LISTED NEXT TO THE LETTERS A, B, C, D, AND E. YOU SHOULD CHOOSE THE ANSWER YOU BELIEVE BEST DESCRIBES YOUR FEELING AND BLACKEN THE SPACE OVER THE CORRECT LETTER.

A I strongly agree with the statement
B I agree with the statement
C I have no opinion about the statement
D I disagree with the statement
E I strongly disagree with the statement

IT IS MOST IMPORTANT THAT RESPONSES DESCRIBE THE PROGRAM AS IT CURRENTLY OPERATES AT THE BETTENDORF MIDDLE SCHOOL.

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SPACE UTILIZATION:

1. Open space provides a good opportunity for effective team teaching.

2. Open space is less conducive to work and more "open" to conversation and socialization than a smaller, more contained room would be.

3. Open space provides an informal setting which lends itself to creative learning.

4. Smaller, more traditional classrooms are necessary for those who cannot function in a large open space with its many distractions.

5. Open space is not effective for the slow learner or dependent type student.

6. Open space allows for large group instruction of that material which lends itself to less individual or personal attention.

7. To increase the number of students in one place necessarily increases the confusion and control problems.

8. Open space learning centers at Bettendorf Middle School better utilize teacher strengths than more traditional classrooms would.

9. Open space learning is too impersonal - students get lost too easily in a large group.

10. Open space learning benefits students by exposing them to a greater variety of teaching personalities.

11. Communication and rapport with students are more difficult in open space situations.

12. Open space allows for more individualized activities geared to the child's ability than a contained classroom would.

13. The general problem of "students not listening" has resulted from student efforts to tune out the additional distractions of an open space learning environment when they personally are ready for quiet.

14. The combination of open space and small rooms utilized at Bettendorf Middle School allows for grouping students according to their needs, thus enabling them to progress at their own rate and level.

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15. A combination of open space and small rooms allows for better utilization of professional human resources, according to individual strengths.

16. In the current Bettendorf Middle School operation, the learning activity governs the space rather than the space governing the learning activity.

OTHER COMMENTS YOU MAY HAVE REGARDING ADVANTAGES OR DISADVANTAGES OF CURRENT SPACE UTILIZATION

_____

_____

_____

_____

TEAM TEACHING-TEAM PLANNING

17. Teaching philosophies of team members are sometimes so far apart that it is difficult to reach a decision (agreement) on discipline procedures, expectations desired from students, and various approaches to learning.

18. Team teaching at Bettendorf Middle School offers a variety of personalities and styles for students in both methods and materials, thus enabling a student to work with a teacher he/she likes.

19. Team teaching at Bettendorf Middle School tends to allow weak team members to hide and shirk responsibilities.

20. Team teaching at Bettendorf Middle School enables more children to benefit from a teacher's personal strengths.

21. Instead of team teaching, we have tended to develop a system of turn teaching.

22. Team teaching at Bettendorf Middle School encourages each individual teacher to expand his/her knowledge and improve his/her own teaching methods by the stimulus of observing other members of his/her team.

23. Team teaching has turned into little more than a production line for completed packets.

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24. Constantly teaching with others in a large area causes a teacher to lose his/her identity, thus stifling individual ingenuity, initiative, and responsibility.

25. The sharing of ideas at Bettendorf Middle School results in better curriculum, since several opinions are involved.

26. Strong, extrovert types sometimes overpower other team members with good ideas, thus stifling creative contributions.

27. There is a critical shortage of time when all team members are available for collective planning.

28. Team planning at Bettendorf Middle School offers a chance to talk over problems, get help, reassurance and suggestions, and obtain a fresh approach.

29. Many good ideas are lost in team planning because individual ideas may not agree with team decisions.

30. Team planning at Bettendorf Middle School gives consistency to the program presented to students. This prevents overlap and omissions.

31. An excessive amount of team planning time is utilized in mechanical procedures rather than actually discussing student needs.

32. Teachers at Bettendorf Middle School are taking advantage of each other's special field of knowledge by sharing ideas.

OTHER COMMENTS YOU MAY HAVE REGARDING ADVANTAGES OR DISADVANTAGES OF TEAM TEACHING - TEAM PLANNING

_____

_____

_____

_____

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CRITICISM PROBLEMS

31. Students starting from where they have progressed experience both success, more learning and less behavior problems.

34. Continuous progress (individualized learning) is not occurring at Bettendorf Middle School. Since most students are subjected to group evaluation techniques, there is little real, continuous progress.

33. Continuous progress at Bettendorf Middle School eliminates wasted time for students. This enables them to advance to levels that they would not reach in traditional situations.

36. There is a definite lack of time for careful evaluation and planning with and for each individual.

37. Continuous progress, as practiced at Bettendorf Middle School, gives each child the opportunity to learn and add to his skills without the stigma of failure.

38. The lack of enough different types of instructional materials at Bettendorf Middle School causes students to get "bogged down" with packets.

39. With proper planning, continuous progress can be accomplished within current traditional pupil-teacher ratios.

40. It is difficult for students to share ideas and express ideas to the group when they are working at different speeds.

OTHER COMMENTS YOU MAY HAVE REGARDING ADVANTAGES OR DISADVANTAGES OF CONTINUOUS PROGRESS

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[illegible]

44. Independent study in Intermediate Middle School generates an excellent means of encouraging students to pursue their own interests, explore new ideas in depth, and expand their scholastic talents to more than one area.

45. Many children having reading problems would look at materials content differently participate in independent study.

46. Independent study at Intermediate Middle School allows an open [illegible] that will assist and the development of individual responsibility.

47. Independent study cannot take place without excellent direction. The idea that students can be "let go" is not sound educational philosophy.

48. Independent study at Intermediate Middle School is necessary since more than enthusiasm, an initial "investment orientation" and corrigendum.

49. Many students cannot accept responsibility for budgeting their time or allocating their own energies and interests, but they want this freedom.

50. Students at Intermediate Middle School currently have too many projects, behavioral objectives, and [illegible]. A genuine attempt at lessening expectations is necessary.

51. Misuse of contract terms and definitions for independent study is more prevalent than the shortage of time.

OTHER COMMENTS YOU MAY HAVE REGARDING ADVANTAGES OR DISADVANTAGES OF INDEPENDENT STUDY

[illegible]

[illegible]

Do not circulate

[illegible]

1. [illegible] [illegible] [illegible]

ITEM ANALYSIS - 84 TEACHERS

	STRONGLY AGREE (%)	AGREE (%)	NO OPINION (%)	DISAGREE (%)	STRONGLY DISAGREE (%)
44.	43	41	2	12	2
45.	17	43	21	14	5
46.	31	56	5	7	1
47.	24	38	23	14	1
48.	8	19	30	37	6
49.	6	45	8	36	5
50.	26	34	14	20	6
51.	48	43	1	7	1
52.	4	50	15	25	6
53.	11	32	15	35	7
54.	1	12	15	55	17
55.	8	24	33	31	4
56.	12	23	13	43	9
57.	13	27	7	43	10
58.	30	63	6	1	0
59.	30	45	6	15	4
60.	1	13	5	45	36
61.	27	51	6	16	0
62.	42	56	2	0	0
63.	1	34	44	10	11

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